

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re U.S. Patent No. 6,762,215 |) | Serial No. 10/081,533 |
|----------------------------------|---|----------------------------------|
| Inventor(s): Akira UDAGAWA et al |) | Filed: February 25, 2002 |
| Issue Date: July 13, 2004 |) | Attorney Docket No. 001458.00012 |

RADIATION-MODIFIED POLY (TETRAFLUOROETHYLENE) RESIN FEEDS AND A PROCESS FOR PRODUCING THE SAME

PETITION UNDER 37 CFR 1.183 FOR CERTIFICATE OF CORRECTION

U.S. Patent and Trademark Office Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314

Sir:

Applicants hereby petition to correct the record to include a reference on the front cover of the above identified patent to correct the Assignee name from "Japan Atomic Energy Research" to -- Japan Atomic Energy Research Institute--.

The original Assignment was recorded on February 25, 2002, to Japan Atomic Energy Research Institute, at Reel 012644, Frame 0692. A copy of the Notice of Recordation of Assignment Document is enclosed.

Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves one page. The Patent and Trademark Office is authorized to charge our Deposit Account No. 19-0733 for \$130 for this petition as set forth in 37 CFR 1.117 (h), and for any additional fees required.

04/21/2005 JADDO1 00000079 190733

676.2215

01 FC:1464

130.00 DA

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: April 20, 2005

William J. Fisher

Reg. No. 32,133

1001 G Street, N.W. (11th Fl.) Washington, D.C. 20001 202-824-3000

PATENT NO.:

6,762,215

DATED:

July 13, 2004

INVENTOR(S):

Akira UDAGAWA et al

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Cover Page, Assignee section (73):

Please replace "Japan Atomic Energy Research" with -- Japan Atomic Energy Research Institute--

Mailing Address of Sender:

U.S. PAT. NO 6,762,215

No. of add'l copies @ \$0.50 per page

Banner & Witcoff, Ltd. 11th Floor 1001 G Street, N.W. Washington, DC 20001-4597

PATENT NO.:

6,762,215

DATED:

July 13, 2004

INVENTOR(S):

Akira UDAGAWA et al

It is certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

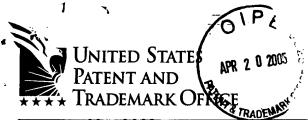
On the Cover Page, Assignee section (73):

Please replace "Japan Atomic Energy Research" with -- Japan Atomic Energy Research Institute--

Mailing Address of Sender:

U.S. PAT. NO 6,762,215

Banner & Witcoff, Ltd. 11th Floor 1001 G Street, N.W. Washington, DC 20001-4597 No. of add'l copies @ \$0.50 per page



MAY 02, 2002

BANNER & WITCOFF, LTD. WILLIAM J. FISHER 1001 G STREET, NW. SUITE 1100 WASHINGTON, DC 20001-4597 PTAS

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Commissioner for Trademarks Arlington, VA 22202-3513 www.uspto.gov

MAY 0 7 2002



BANNER AND WITCOFF

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 02/25/2002

REEL/FRAME: 012644/0692

NUMBER OF PAGES: 2

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

UDAGAWA, AKIRA

DOC DATE: 02/14/2002

ASSIGNOR:

OSHIMA, AKIHIRO

DOC DATE: 02/14/2002

ASSIGNEE:

JAPAN ATOMIC ENERGY RESEARCH INSTITUTE 2-2, UCHISAIWAI-CHO 2-CHOME, CHIYODA-KU TOKYO, JAPAN

SERIAL NUMBER: 10081533

PATENT NUMBER:

FILING DATE: 02/25/2002

ISSUE DATE:

012644/0692 PAGE 2

THERESA FREDERICK, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

APR 2 0 2005 C

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re U.S. Patent No. 6,762,215 |) | Serial No. 10/081,533 |
|---|---|----------------------------------|
| Inventor(s): Akira UDAGAWA et al |) | Filed: February 25, 2002 |
| inventor(s). Timina o'Briori wiri or ar |) | • , |
| Issue Date: July 13, 2004 |) | Attorney Docket No. 001458.00012 |

For: RADIATION-MODIFIED POLY (TETRAFLUOROETHYLENE) RESIN FEEDS AND A PROCESS FOR PRODUCING THE SAME

REQUEST FOR CERTIFICATE OF CORRECTION

U.S. Patent and Trademark Office Customer Service Window Randolph Building, Mail Stop: Certificate of Correction Branch 401 Dulany Street Alexandria, VA 22314

Sir:

Pursuant to 35 U.S.C. § 254 and 37 C.F.R. § 1.322, this is a request for the issuance of a Certificate of Correction in the above-identified patent. Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves one page.

The mistakes identified in the appended Form occurred through no fault of the Applicants, as clearly disclosed by the records of the application, which matured into this patent. Enclosed for your convenience are the relevant portions of the Examiner's Amendment, included with the Notice of Allowance dated March 2, 2004, and the Preliminary Amendment filed February 25, 2002.

Issuance of the Certificate of Correction containing the corrections is respectfully requested. Since these changes are necessitated through no fault of the Applicants, no fee is believed to be associated with this request. Nonetheless, should the Patent and Trademark Office determine that a fee is required, please charge our Deposit Account No. 19-0733.

Respectfully submitted,

BANNER & WITCOFF, LTD.

Dated: April 20, 2005

1001 G Street, N.W. (11th Fl.) Washington, D.C. 20001 (202) 824-3000

William J. Fisher

Registration No. 32,133

PATENT NO.:

6,672,215

DATED:

February 25, 2002

INVENTOR(S):

Akira UDAGAWA et al

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 6, Claim 1, Line 39:

Please replace "temperature 30" with --temperature between 30--

In Column 6, Claim 4, Line 50:

Please replace "claim" with --claim 3--

Mailing Address of Sender:

U.S. PAT. NO 6,762,215

Banner & Witcoff, Ltd. 11th Floor 1001 G Street, N.W. Washington, DC 20001-4597 No. of add'l copies @ \$0.50 per page

PATENT NO.:

6,672,215

DATED:

February 25, 2002

INVENTOR(S):

Akira UDAGAWA et al

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 6, Claim 1, Line 39:

Please replace "temperature 30" with --temperature between 30--

In Column 6, Claim 4, Line 50:

Please replace "claim" with --claim 3--

Mailing Address of Sender:

Banner & Witcoff, Ltd. 11th Floor 1001 G Street, N.W.

1001 G Street, N.W. Washington, DC 20001-4597 U.S. PAT. NO 6,762,215

No. of add'l copies @ \$0.50 per page



001459-00012 United States Patent and Trademark Office

PTA duc:

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

fec NOTICE OF ALLOWANCE AND FEE(S) DUE

22907 7590 **BANNER & WITCOFF** 1001 G STREET N W **SUITE 1100** WASHINGTON, DC 20001



RECEIVED

EXAMINER

BERMAN, SUSAN W

MAR 0 4 2004

PAPER NUMBER

ART UNIT 1711

DATE MAILED: 03/02/2004

BANNER & WITCOFF

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/081,533 02/25/2002 Akira Udagawa 001458.00012 1051

TITLE OF INVENTION: RADIATION-MODIFIED POLY (TETRAFLUOROETHYLENE) RESIN FEEDS AND A PROCESS FOR PRODUCING THE SAME

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|-----------|-----------------|------------------|------------|
| nonprovisional | NO | \$1330 | \$300 | \$1630 | 06/02/2004 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

Page 1 of 3

| SPE | дрисацоп но. | Applicant(s) | ΓI |
|---|---|--|---------------------------|
| (0, %) | 10/081,533 | UDAGAWA ET AL. | |
| Notice of Allowability APR 2 0 2005 | Examiner | Art Unit | |
| APR 2 | Susan W Berman | 1711 | *** |
| The MAILING DATE of this continuication appe All claims being allowable, PROSECUTION ON THE MERITS IS (herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGOT THE OFFICE OF THE OFFICE OFFI | (OR REMAINS) CLOSED in this apport or other appropriate communication GHTS. This application is subject to | dication. If not include will be mailed in due | ed course. THIS |
| 1. \boxtimes This communication is responsive to <u>Election filed 12-05-05</u> | <u>3</u> . | | |
| 2. The allowed claim(s) is/are 4,5 and 9-22. | | | • |
| 3. \boxtimes The drawings filed on <u>25 February 2002</u> are accepted by the | e Examiner. | | |
| 4. Acknowledgment is made of a claim for foreign priority un a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONMITHIS THREE-MONTH PERIOD IS NOT EXTENDABLE. | been received. been received in Application No uments have been received in this r of this communication to file a reply of | national stage applicat | |
| 5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give | s reason(s) why the oath or declara | | OTICE OF |
| 6. CORRECTED DRAWINGS (as "replacement sheets") must | | 240) 44 1 1 | |
| (a) including changes required by the Notice of Draftsperso | on's Patent Drawing Review (P10- | 948) attached | |
| 1) hereto or 2) to Paper No./Mail Date | | ee At E | |
| (b) ☐ including changes required by the attached Examiner's Paper No./Mail Date | | | |
| Identifying indicia such as the application number (see 37 CFR 1.6 each sheet. Replacement sheet(s) should be labeled as such in the | | | back) of |
| DEPOSIT OF and/or INFORMATION about the depose attached Examiner's comment regarding REQUIREMENT F | it of BIOLOGICAL MATERIAL INFORTHE DEPOSIT OF BIOLOGICA | nust be submitted. N AL MATERIAL. | lote the |
| Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08 Paper No./Mail Date | 5. Notice of Informal Pa 6. Interview Summary Paper No./Mail Date 7. Examiner's Amendm 8. Examiner's Stateme 9. Other | (PTO-413), e nent/Comment nt of Reasons for Allor Susan W Berman | · |
| | | Primary Examiner Art Unit: 1711 | |
| | | | |

Application/Control Number: 10/081,533

Art Unit: 1711

Election/Restrictions

Applicant's election without traverse of Group II in Paper No. submitted 12-05-2003 is acknowledged.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with William Fisher on February 23, 2004.

The application has been amended as follows:

Cancel claims 1-3.

In claim 4, line 5,, delete "room" and insert therefor -- a -- and after "temperature" insert between - 30 and 50 °C --.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The instantly claimed method for producing a radiation-modified poly(tetrafluoroethylene), "PTFE", resin feed from unsintered poly(tetrafluoroethylene) is distinguished from the prior art known to the examiner by treatment with ionizing radiation in an absorbed dose of no more than 1,000Gy in air and within the recited temperature range. The cited prior art also fails to mention lowering the melting point without changing the quantities of heat of fusion and heat of crystallization, as set forth in the instant claims.

001458.00012 PATENT 🗆 DESIGN 001458,00012 B&W Ref.: RETURN WHEN SERIAL NUMBER IS ASSIGNED TO APPLICATION USPTO: Please return this card, indicating receipt date and Application Serial No. of the following patent application: Applicant(s): Akira UDAGAWA Akiniro Ostima and Radiation-Modified Poly (Tetrafluoroethylene) Title: Resin Feeds and a Process for Producing the Same February 25,2002 Filing Date: _ 127US Client Ref.: CH: CS:KHR, FP/N-3-527US Attorney/Secretary: WJF/qpd

| ■ PATENT □ DESIGN B&W Ref. <u>OOI</u> | #58 . 00012 Date 2-25-02 Rm |
|--|---|
| Senal/Patent No. TBA | Atty/Sec WIF/apd |
| nventor Akira UDA SAWA , Rtal. | Client Uvasa and Haka |
| THE RADIATION-MODIFIED POLY (TET) | AFLIDROETHILDUE) RESIN FEEDS AND A |
| PROCESS FOR PRODUCING THE | SAME |
| The following has been received in the U.S. Patent and T | |
| | ☐ Sequence Listing : ☐ Diskette ☐ Paper |
| (# of independent claims 2); Abstract | ☐ Amendment ☐ Response : OA dtd |
| Drawings: Dramal Informal | Petition for Extension of Time until |
| # of distinct sheets: Figs | CPA RCE w/Ext of Time : OA dtd |
| Declaration/Power of Attorney: Executed Unexecuted | ☐ Request for Approval of Drawing Changes |
| Assignment w/PTO Cover Sheet | ☐ Notice of Appeal & Fee |
| □ IDS w/PTO 1449 □ References □ w/Fee | ☐ Brief: ☐ Appeal & Fee ☐ Reply |
| Preliminary Amendment | ☐ Request for Oral Hearing |
| Priority Claim (Foreign or U.S. Provisional, B&W # | ☐ Issue Fee ☐ Advance Patent Copies (# ordered) |
| Tapan 2001-053496 2/29/01 Country Appl.# Date | Notice of Allowance dtd |
| Country Appl. # Date W/Foreign Priority Document(s) | Amendment under 37 CFR 1.312 |
| Application: CIP Continuation Division | Request for Certificate of Correction |
| Parent Ser. No | Transmittal Pee Transmittal Wixtun. to Charge Deposit Accor |
| U.S. Provisionalpp Spec/Claims; Cover Sheet | Certificate of Mailing FEB 2 5 2002 |
| Response to Missing Parts/Requirements dtd | Check#for\$ |
| Response to Notice to File Corrected Appln. Papers dtd | - Application Data Sheets |
| Request for Expedited Foreign Filing License | PRADEMA |
| Request for Corrected: Filing Receipt Assignme | nt 🗒 |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

| In re APPLICATION OF: | OIPE |) | |
|--------------------------|----------------|--------|--------------------------|
| • | APR 2 0 2005 6 |) | ATTY DKT NO. 01458.00012 |
| | |) | ATTN BOX PATENT |
| SERIAL NO.: TBA | FRADEMAR |) | APPLICATIONS |
| FILED: February 25, 2002 | | ,) | • |

FOR:

RADIATION-MODIFIED POLY (TETRAFLUOROETHYLENE) RESIN FEEDS AND A

PROCESS FOR PRODUCING THE SAME

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Please amend the above-identified new application as follows.

IN THE SPECIFICATION

Page 1, following the title, please add the following new paragraph;

--This application is based upon and claims the benefit of priority from Japanese Patent Application No. 2001-053495, filed February 28, 2001, the entire contents of this application are incorporated herein by reference--.

IN THE CLAIMS

Please delete Claims 6-8 and insert the following Claims therein:

- --9. The process according to claim 4, wherein the ionizing radiation is selected from electron beams, x-rays, γ-rays, neutron beams and high-energy ions which are used either independently or in admixture.
- 10. The process according to claim 5, wherein the ionizing radiation is selected from electron beams, x-rays, γ-rays, neutron beams and high-energy ions which are used either independently or in admixture.
- 11. The process according to claim 4, wherein the poly (tetrafluoroethylene) resin feed is in powder form.
- 12. The process according to claim 5, wherein the poly (tetrafluoroethylene) resin feed is in powder

form.

- 13. The process according to claim 9, wherein the poly (tetrafluoroethylene) resin feed is in powder form.
- 14. The process according to claim 10, wherein the poly (tetrafluoroethylene) resin feed is in powder form.
- 15. The process according to claim 4, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with solvents.
- 16. The process according to claim 5, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with solvents.
- 17. The process according to claim 9, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with solvents.
- 18. The process according to claim 10, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with solvents.
- 19. The process according to claim 11, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with solvents.
- 20. The process according to claim 12, wherein the poly (tetrafluoroethylene) resin feed is a dried powder of poly (tetrafluoroethylene) resin obtained by emulsion polymerization or suspension polymerization, which is optionally granulated or dispersed uniformly in solvents or wetted with